Equations of the spectrum of Planck black-body radiation in their primary string version.

At the end of 19th century scientists were convinced that soon the physics will explain all phenomena of nature. To the point that William Thompson, later pronounced Lord Kelvin, declared that physics seemed a harmonious ensemble which, in essence, was finished. But he just was not seeing but two black clouds: the negative result of the Michelson-Morley experiment and the catastrophe of ultraviolet from Rayleigh-Jeans law.

Thus, in this vision we have two very important points:
- First, how is typical of humanity to have the presumption that it has all knowledge of the universe, which obviously is not true;
- Second, it shows that it was a man with clear knowledge of the science of his time, understanding where the work was missing to achieve the ultimate glory.

Precisely from these mentioned two problems pillars of science of the 20th century are born, such as the theory of relativity of Einstein in 1905, as a solution to the paradox of light being invariant in inertial frames. And also such as Planck equation, which formed the basis for the birth of quantum theory and the description of the photoelectric effect by Einstein.
Adding to these theories, in the same year of 1905, we have the Brownian motion, which gives rise to the modern and clear concept of atoms, which until that time was not recognized.

Einstein clearly is the father of the theory of relativity, probably with the support of his wife Mileva. He is one of the fathers of modern atomic theory, and with the photoelectric effect, is one of the founders of quantum mechanics, and adds to him the theory of wave-matter duality for light, which is present in photons, which is one of pillars of quantum mechanics to the present day.
At this point it is important to remember Hendrik Antoon Lorentz, who also developed a theory of relativity, but had no Einstein joviality to break with the classical mechanics, but of him is the equation that supports relativity. And without a doubt he was a big idol for Einstein.

And we have the equation that revolutionized the science to the present date, born of intellectual despair of Max Planck in trying to find a solution to the spectrum of electromagnetic radiation from heated black-body.
In a letter to R. W. Wood in 1931, Planck describes the birth of the constant that bears his name:

- Briefly summarised, what I did can be described as simply an act of desperation. By nature I am peacefully inclined and reject all doubtful adventures. But by then I had been wrestling unsuccessfully for six years (since 1894) with the problem of equilibrium between radiation and matter and I knew that this problem was of fundamental importance to physics; I also knew the formula that expresses the energy distribution in the normal spectrum. A theoretical interpretation therefore had to be found at any cost, no matter how high.

The equation was released to the world on December 14, 1900, coming as a gift for the century that began! He imagined that energy could only exist in fixed packages and these packages were oscillating, creating the principle of the harmonic oscillator. And he introduced the famous Planck's constant h, which was the basic unit of energy of the oscillators, fractional values of this unit not being permitted.

It is important to note that Planck's constant is not a constant, but a divider between the geometric universe of strings and the universe viewed by mankind, which is a holographic projection, i.e. a figure of interference of strings' oscillations.

Finally, it is worth saying that millennia ago the Indians have already described the Maya, or illusion, since everything is just information!

Also from the fact that Planck constant is composed of projection of geometric and harmonic movements of the strings, is born the Heisenberg uncertainty principle. For the constant being the object composed of strings and harmonic movement, and because all the energies and masses derive from it, it would seem impossible to determine the coordinates of all observables. Hence arises the quantum mechanics and its statistical and of wave-particle duality interpretation, which in reality is a theory of finite elements and the movement of the strings, which are the essence of the universe!

The final theory is a deterministic one, but is very intensive in calculations, quantum mechanics being an optimal compromise between accuracy and intensiveness of the calculations. And as a side effect there is the apparent indeterminacy of observables that become interconnected and probabilistic, preventing jointly and simultaneously measure the position and the velocity of a particle.
However today it is already observed with weak measures, that it is possible with certain artifices to measure both properties, which in no way diminishes the merit of quantum mechanics, but only demonstrates its limitations.

Around the harmonic oscillator the wave equation by Erwin Schrödinger and the use of the Hilbert space are created, to represent the quantum world of the interactions of these oscillators, being this model introduced by Heisenberg. The Hilbert space is a vectorial, complex, piled infinite planes space with a unitary character, seen as the non-locality of the theory. The complex vector originates from the fact that it represents the universe in which we are in the real plane and an orthogonal universe in the complex plane, parallel to what we are in. This universe is connected by black holes in an Einstein-Rosen bridge between two universes, at the points of rupture of the fabric of space, known as wormholes.
Both universes are interconnected at their edges, which make the strings undergo a move given by the Möbius equation and have an appearance of a Möbius strip of N piled plans, and this tape is made of string segments. This allows a connection between the various plans at certain points and yields the exclusion principle of Linus Pauling in atomic orbits.
And this rotation point is seen as a cosmic egg, which is interpreted as the Big Bang! But in reality this universe is a self-enclosed sphere and is created in a system of self-assembly of strings. Being that the plans are made of branes, and on each side of a brane runs a time's arrow, creating two universes: one of matter and another one of anti-matter which is running in opposite direction.

We will follow the story of the evolution of physics.
Quantum mechanics had several parents until its final formalization in Solvay conference held in Brussels from 24 to 29 October 1927. In addition to Max Planck, Niels Bohr and Einstein, the main founders of quantum mechanics are: Arnold Sommerfeld, Max Born, Werner Heisenberg, Erwin Schrödinger, Paul Dirac and Louis de Broglie.

It should be noted that quantum mechanics has several interpretations of reality, a Copenhagen one is officially accepted, but the right one is that of Einstein, Erwin Schrödinger and Louis de Broglie, which is a realistic interpretation and believes that there is a deterministic hidden reality, that quantum mechanics hides!

At this point I finish the brief history of the beginnings of 20th century physics and I start to describe the beginnings of the 21st Century physics.

As said by the ancient Egyptian Thoth, called Hermes Trismegistus by the Greeks and Jupiter by the Romans: "As below so above, and as above so below! Nothing stands still, everything moves, everything vibrates. The all is mind, the universe is mental".
Note: The translation of the mental universe to the West is a massively parallel quantum computer, i.e. the all is information, and the universe is a quantum computation of information, generating a hologram that is an illusion!

It is clear that philosophy, science and religion are all part of the same structure and different ways of interpreting reality.

No one had noticed that the harmonic oscillator was not a purely theoretical concept, but a physical fact! The harmonic oscillator is made from a string. And this string creates a structure of 5 dimensions, 3 spatial and 2 virtual, temporal. All the forces of the universe originate from a string and from the movement, which is the essence of creation.
This vibrational movement generates interference figures that are perfect harmonics of the diameter of the universe by the speed of propagation of longitudinal waves in it. And these points generate the confinement of the atomic nucleus, creating a hidden crystal structure, which can be noted in distribution of atomic orbits of the atoms. That is, the hologram generates the illusion of reality!

This string is projected into the universe as the constant of magnetic permittivity of space and the electrical permeability of space. These two really fundamental constants allow describing everything in the universe and all its equations. It even allows us to understand the philosophical and religious concepts that today seem to have no connection.
I chose to publish this equation in its format of string, by judging that it was the origin of science of the 20th century and I want it to be the turning point of the 21st century.
This equation is just one amid the complete description of everything in the universe, from these two constants that are projected here.

But the reality is deeper than this, because to understand everything, I will have, at another time, to describe the string and its behavior.
Only then it will be clear that the universe is made of strings, the movement internally creates a standing wave, a hologram and, as a final understanding, is a massively parallel quantum computer. And as such it has a creator!

Einstein never accepted quantum mechanics as a complete theory and he was right once again. The quantum mechanics is a theory of finite elements of the final string theory!
Einstein in 1917, shortly after the publication of the general theory of relativity, wrote to his friend Felix Klein:

- I have no doubt that just as Newton's theory was completed by general relativity; the day will come when the latter description also must give way to another, for reasons that, at this point, we do not even suspect.

He had a conviction that the final theory would probably be totally different from anything ever seen, and that it would have to be built from scratch. And again he was right!
Though he pursued this theory for more than 40 years in a solitary way, his passion for light blinded him to see the road, but not to the existence of the same.
Einstein became a heretic to his peers of 20th century, by not accepting quantum mechanics as the final word of the creator.
As a maxim of his thought, he expressed: "I do not believe that God play dice with the universe."
It was considered by many of his peers Don Quixote, in an analogy with the epic battles against windmills.

Here I start to demonstrate that his dream was real.
And indeed the creator does not play dice, because this theory is deterministic, but also the universe is not what one would expect it to be.
Also note that in these new equations any actual physical constant ceases to exist, unless the projection of the string in this universe, which are the constants of the space.
When ceasing to exist, Planck's constant, which is the basis of all quantum mechanics' calculations, shows that it is not the final theory as Einstein already supposed, but rather is a theory of contours, or as it is called in engineering, of finite elements. It only analyzes the margin relations and describes nothing about the interior of the object.

This theory agrees 100% with the theories of classical mechanics and electromagnetism, theories of relativity and quantum mechanics, however each must be seen within its limits.
But the theory itself, as Einstein imagined, has no resemblance to any other, however it borrows concepts from other theories in order to be described in a way understandable for humanity.

So to honor him and all the others who worked on finding a final theory, and in particular Faraday, the first modern scientist to dream of such a theory, the name I gave to the theory is: PROJECTION OF THE ZERO DIMENSION IN THE RELATIVITY OF INFO QUANTICS.

U = E =R= energy in joules/s
u0 = magnetic permittivity of space = $1.2566370614x10^{-6}$ H/m
&0 = electric permeability of space = $8.854187817x10^{-12}$ A/m
*b = relativistic correction of speed = 0.854245426 = sqr(a).10
*j = relativistic correction of local density = 0.997186146
L = wavelength in meters
F = v = frequency in Hertz
T = temperature in Kelvin
k = Boltzmann constant = $1.3806488x10^{-23}$ joules/kelvin
h = Planck's constant = $6.62606957x10^{-34}$ joules/s
pi = 3.14159265359
c = 299792458 m/s
a = fine structure constant = 0,0072973524
e = exponential of neperian basis
sqr = square root
()n = raised to the power n
. = multiplication
/ = division

Equations	> Planck	= Jorge
U =	(h.v)/((e((h.v)/(k.T)))-1)	= (2.pi.(u0.&0)2.F.*b.*j)/((e(((2.pi.u0)2.sqr((*b)3).(*j)9.F)/T))-1)
R.v =	((h.(v)3)/(c)2).(1/((e((h.v)/(k.t)))-1))	= (2.pi.(uo.&0.F)3.*b.*j)/((e(((2.pi.u0)2.sqr((*b)3).(*j)9.F)/T))-1)
E.L=	(((c)2.h)/(L)5).((e((c.h)/(k.L.T)))-1)	= ((2.pi.u0.&0.*j.*b)/(L)5).(e(((2.pi)2.sqr((u0.*b)3).(*j)9)/(sqr(&0).L.T))-1)

If someone does not believe in these 4 numeric values that I use in the equations, please compare them with these same 4 values in another work posted here, I demonstrate how to derive the theory of special relativity from quantum mechanics.
Note: The small discrepancy of values in the equations is due to use of a unit of atomic mass, which is derived from carbon 12 as the reference of atomic weight, but they forgot that neutrons and protons vary in mass, according to the nucleus which they are in.
And this mistake causes the estimated error in the Boltzmann constant being 10 times greater than what is believed correct today. And this reflex on the value of Boltzmann constant results in a value calculated a little less than the real value.

The real value is $1.38075432909 \times 10^{-23}$ joules/kelvin. If this value is used in the calculations of Planck equations, my equations will give the results very similar to Planck's, proving that everything we have around is the result of the projection of the strings in this universe, which means we see a hologram!

The result has a precision of 1 part per million from Planck's equations, it's because there should have been made small adjustments to the other constants, which are used on our planet.

At last, I would like to add that Feynman had fascination for the value 0.08542455, which is a constant of the creation of electron-positron pair, and is the same "*j" divided by 10 and rounded to 8 significant digits.
This number indicated to him "the hand of God" behind the universe and, in some ways, he was right. For this number 10 indicates the amount of strings separating the universe of matter of its parallel antimatter one. And it comes directly from the geometric structure of strings in the construction of the fabric of space, which creates the universe.

REFERENCES

1. Andreeta, J. P., Andreeta, M. L. Principios herméticos comsciência, 2010, ISBN: 978-85-61080-07-05
2. Bhaktivedanta Swami Prabhupada, A. C. Veda - Segredos do Oriente, Uma antologia de artigos e ensaios (Veda – Secrets from the East), 2013, ISBN: 978-85-7015-130-8
3. Bohr, N. Sobre a construção de átomos e moléculas, 1963, ISBN: 978-31-0619-1
4. Calaprice, A. The Ultimate Quotable Einstein, 2010, ISBN: 978-0-691-16014-6
5. Cook, D. B. Probability and Schrödinger's Mechanics, 2002, ISBN: 978-238-191-0
6. Darabi, A., Hayat, A., Mahler, D. H., Rozema L. A., Soudagar, Y., Steinberg, A. M. Violation of Heisenberg's Measurement-Disturbance Relationship by Weak Measurements, 2012, DOI: 10.1103/PhysRevLett.109.100404
7. Eisberg, R., Resnick, R. Física Quántica, 1994, ISBN: 978-85-7001-309-5
8. Feynmann, R. QED: The Strange Theory of Light and Matter, 1985, ISBN: 0-691-08388-6
9. Filho, A. M. Os átomos também amam, 1984, Facudade São Judas Tadeu
10. Fock, V. Princípios de mecânica quântica, 1987, Editora Mir, Moscou.
11. Greco, P. O sonho de Einstein - Em busca da teoria do todo, 2011, ISBN: 978-85-268-0950-5
12. Griffiths, D. Mecânica quántica, 2011, ISBN: 978-85-7605-927-1
13. Halvorson, H. Deep Beauty: Understanding the Quantum World Through Mathematical Innovation, 2011, ISBN: 978-1-107-00570-9
14. Kocsis, S. et al. Observing the Average Trajectories of Single Photons in a Two-Slit Interferometer, 2011, DOI: 10.1126/science.1202218
15. Lorentz H. A., Einstein A., Minkowski H. O principio da relatividade, 2001, ISBN: 972-31-0723-6
16. Martins, J. B. Teoria da relatividade - O Caminho de Lorentz - A Revolução de Einstein, 2011, ISBN: 978-85-399-0058-9
17. Planck, M. Eight Lectures on Theoretical Physics, 1915, ISBN: 978-0-486-69730-7
18. Reiserer, A., Rempe, G., Ritter, S. Nondestructive Detection of an Optical Photon, 2013, DOI: 10.1126/science.1246164
19. Toledo Piza, A. F. R. Mecânica Quántica, 2009, ISBN: 978-85-3140-748-2
20. Vidick, T., Wehner, S. Does Ignorance of the Whole Imply Ignorance of the Parts? Large Violations of Non-contextuality in Quantum Theory, 2011, DOI: 10.1103/PhysRevLett.107.030402

Ass: Jorge Luiz Silva de Barcellos.